6061 .500

Work Order ID 123539

Thursday, August 07, 2014 11:18:13 AM

123539

Item ID: D4776-5 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID:

Item Name: Spacer **Stop** *NS2*

Start Date: 8/07/14 **Start Qty:** 40.00 *40*

Required Date: 8/07/14 **Req'd Qty:** 40.00 *40*

Reference:

Cust Item ID:

Customer:

Approvals: **Process Plan:** MLJ **Date:** 14-08-11 **Tooling:** _____ **Date:** _____ **Run Start** *NR1*

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr / **Revision Nbr**: D4776 / D									
100		0.00							DAS 40 9-89
100	Hardinge CNC LATHE SMALL					50	Ø		14/08/15
Doosan	**Memo**	0.00							
Doosan Lathe	1-Turn as per Folio and Dwg Dwg rev: D Folio rev: NA								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							DAS 40 9-89
110						50	Ø		14/08/15
QC	**Memo**	0.00							
Quality Control									
120	QC8- Inspect parts - second check	0.00							DAS 37 9-89
120						50	Ø		14.08.19
QC	**Memo**	0.00							
Quality Control									

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function

☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence

☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

Item ID: D4776-5
Revision ID:
Item Name: Spacer
Start Date: 8/07/14 **Start Qty:** 40.00 *40*
Required Date: 8/07/14 **Req'd Qty:** 40.00 *40*
Reference:

Accept *N900040100*
Setup Start *NS1*
Stop *NS2*
Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Chemical Conversion Coat per QSI005 4.1	0.00				50	14-8-19		
130									
HandFinish	**Memo**	0.00							
Hand Finishing									
140	QC7-Inspect Chemical Conversion Coat	0.00				50		14/08/19	
140									
QC	**Memo**	0.00							
Quality Control									
150	Identify as per dwg & Stock Location: ST120	0.00				50X	DAS 28 9-89 AUG 19 2014		
150									
Packaging	**Memo**	0.00							
Packaging									

DQA: _____ Date: _____

DART AEROSPACE

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Item ID: D4776-5
Revision ID:
Item Name: Spacer
Start Date: 8/07/14 **Start Qty:** 40.00 *40*
Required Date: 8/07/14 **Req'd Qty:** 40.00 *40*
Reference:

Accept *N900040100*
Setup Start *NS1*
Stop *NS2*
Cust Item ID:
Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	**Memo**	0.00				MCJ	14-08-20		
Quality Control									

14-8-19

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

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☐ Heat Treat
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☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

Picklist Print

Thursday, August 07, 2014 11:18:12 AM

Work Order ID: 123539 *123539*

Parent Item: D4776-5 *D4776-5*

Parent Item Name: Spacer

Start Date: 8/07/14 **Required Date:** 8/07/14

Start Qty: 40.00 **Required Qty:** 40.00

Comments: IPP REV:A NEW ISSUE 13-08-30 JLM VERIFIED BY:DD IPP
REV:B 13.09.26 AS PER REV.B DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6R0.500		Purchased	No				f	31.1760	**	1			DAS 40 8-89

M6061T6R0.500

6061-T6 Round Bar .500"

14/08/15

Location	Loc Qty	Loc Code	
MAT012	31.176		
124029	1		
→ M128247	18.176		1.5
M129845	12		

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

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☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

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☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
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☐ Drill Holes
☐ Finish
☐ Fit/Function

☐ Folio/Program
☐ Grain
☐ Hardware
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☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

DART AEROSPACE LTD	Work Order:	123539
Description: Spacer	Part Number:	D4776-5
Inspection Dwg: D4776 **Rev:** E D		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

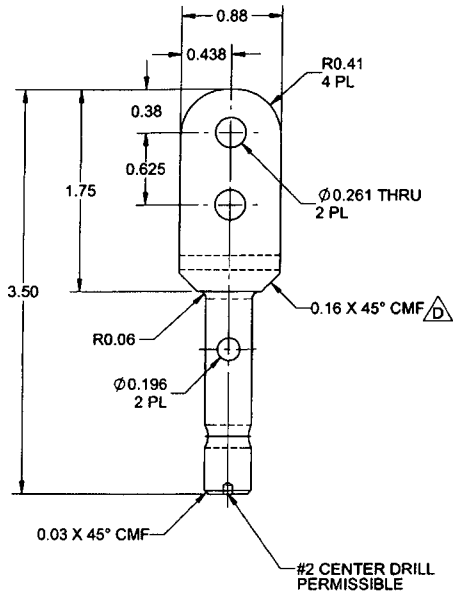
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.13	+/-0.030	.127	✓		VERN	PAD-12
0.25	+/-0.030	.255	✓		"	"
Ø0.625	+/-0.010	.625	✓		Rad G	
Ø0.438	+/-0.010	.438	✓		VERN	"
Ø0.203	+0.005/-0.001	.206	✓		"	"
	DAS		DAS			

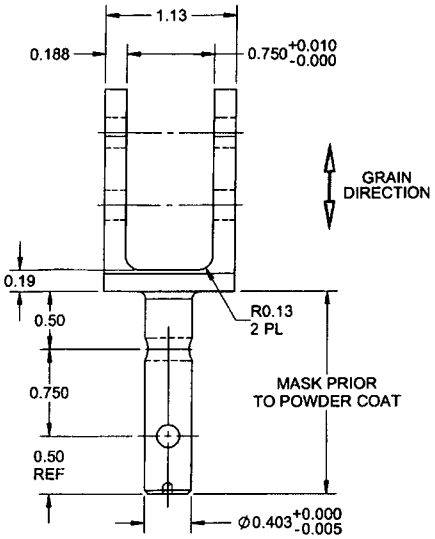
Measured by:	40 9-89
Date:	14/08/15

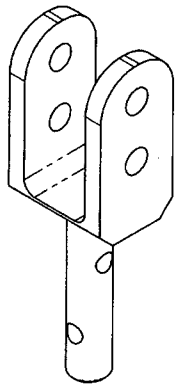
Audited by:	37 9-89
Date:	14.08.19

Preliminary Approval:	
Date:	

Rev	Date	Change	Revised by	Approved
A	14.02.13	New Issue	KJ	







RELEASED
2014 -07- 30

D4776-1 BASKET STRUT CLEVIS

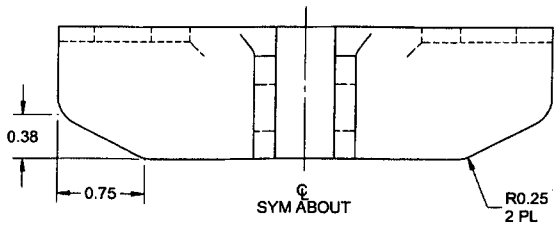
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 123535 MLJ
1408-11

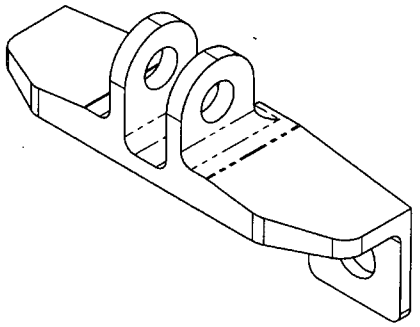
NOTES:
1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8
(OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6B
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 0.08 lbs

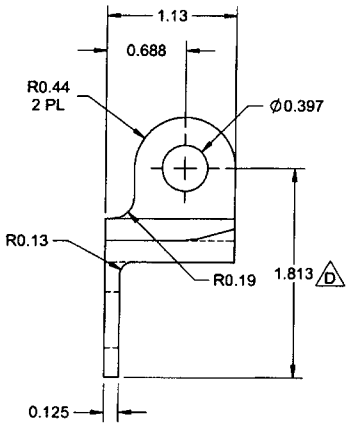
REV.	DESCRIPTION	BY	DATE
D	SHT 1, C6 CHAMFER ADDED. SEE PAR 14-353. SHT 2 ZONE B2 1.813 DIM ADDED FOR CLARITY, ZONE B3 0.53 DIM CORRECTED TO 0.55 DUE TO DESIGN ERROR SEE PAR 14-328.	AJS	14.07.14
C	SHT 2, C7, 1.13 DIM WAS 0.88, C8 0.688 WAS 0.438, ADDED TOP VIEW WITH CHAMFERS. REASON: INTERFERENCE WITH OEM SADDLES.	AJS	13.10.31
B	MULTIPLE DIMENSIONS UPDATED ON -1 FOR INSTALLATION OF 1/4" FASTENERS. INDEX OF HOLES ON THE STEM OF -1 ROTATED 90°. FINISH ADDED TO -1. TOLERANCE ON CLEVIS FOR -1 & -3 TIGHTENED. ADDED -5. REASON: EASE OF INSTALLATION. C3-2 DEPTH DIM ADDED.	AJS	13.08.14
A	NEW ISSUE	AJS	13.08.08

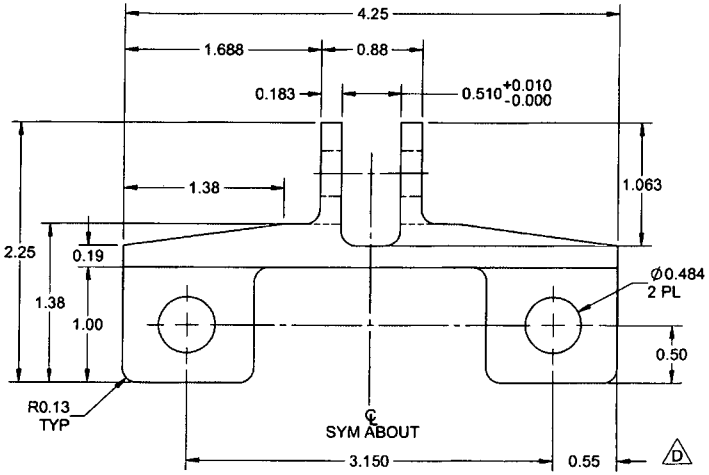
DESIGN	AJS	DART AEROSPACE LTD
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. D4776 REV. D
MFG. APPR.		SHEET 1 OF 3
APPROVED		TITLE BASKET STRUT MACHINED PARTS
DE APPR.		SCALE NTS
DATE	14.07.14	

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GRAIN DIRECTION

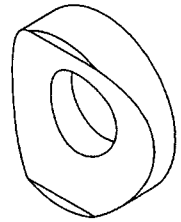
RELEASED
2014 -07- 30

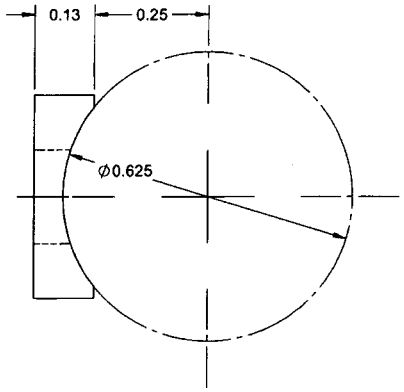
NOTES:
1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8
(OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6B
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: PER DART QSI 044 6.1
7) WEIGHT: 0.18 lbs

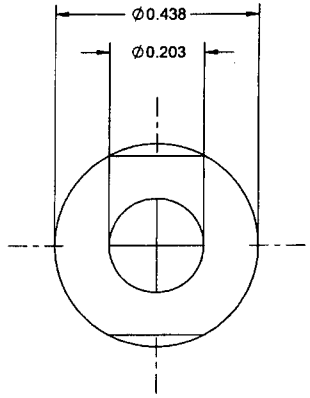
D4776-3 SKIDTUBE CLEVIS

DESIGN	AJS	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	AJS	
CHECKED		DRAWING NO. D4776 REV. D
MFG. APPR.		SHEET 2 OF 3
APPROVED		TITLE BASKET STRUT MACHINED PARTS SCALE NTS
DE APPR.		
DATE	14.07.14	

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D4776-5 SPACER

RELEASED
2014 -07- 30

NOTES:
1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)
OR ASTM B211 OR ASTM B221
REF DART SPEC M6061T6R
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4776-5" AND B/N PER QSI 044 METHOD 6.7
7) WEIGHT: LESS THAN 0.01 lbs

DESIGN	AJS	**DART AEROSPACE LTD** HAWKESBURY, ONTARIO, CANADA
DRAWN	AJS	DRAWING NO. D4776 REV. D SHEET 3 OF 3
CHECKED		TITLE BASKET STRUT MACHINED PARTS SCALE NTS
MFG. APPR.		
APPROVED		
DE APPR.		
DATE	14.07.14	

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